

REMARKS

Claims 1-5, 7-21, 23-35 and 43-46 are pending in this application. Claims 1-5, 7-21, 23-35 and 43-46 have been rejected under 35 U.S.C. §103. By this Amendment, Claims 1, 5, 9, 15, 16, 23, 29, 30, 35, 43 and 46 have been amended. Claims 47-49 have been added. No new matter has been added. Reexamination and reconsideration are respectfully requested.

The Examiner has rejected Claims 5, 7-8, 15, 29 and 35 under 35 U.S.C. §103(a) as being unpatentable over Wu et al., U.S. Patent No. 5,774,551 in view of Candelaore et al., U.S. Patent No. 6,061,449. This rejection is respectfully traversed. However, in an effort to clarify embodiments of Applicant's invention over the cited art and pass the claims to allowance at an earliest possible date, Applicant has amended Claims 5, 15, 29 and 35.

As amended, Claim 5 recites a method of processing data packets comprising, inter alia, coupling a control unit to a first data bus . . . and coupling a plurality of processors to a second data bus independent of each other and independent of the control unit. Claims 15, 29 and 35 recite similar features. These features are not disclosed or suggested in Wu et al. or Candelaore et al., individually or in combination.

While Wu et al. discloses data authentication in a number of places (see, e.g., Figure 1 and column 8, lines 61-66), there is no disclosure or suggestion in Wu et al. that an authentication processor and an encryption processor are coupled to a data bus independently of each other. Moreover, Wu et al. suggests that encryption is actually *dependent* on authentication in that the Wu et al. "process uses a user's primary authentication token for a primary authentication service, such as a password, private key, or other unique data, to encrypt the user's other authentication tokens for other secondary authentication services" (Wu et al., column 3, lines 58-62) and, in fact, does not even disclose an encryption processor separate from an authentication processor.

Candelaore et al. does not make up for the deficiencies of Wu et al. In Figures 1 and 6 of Candelaore et al., the encryption circuits and the authentication circuits are coupled directly to each other. There is no separate, independent connection of the encryption circuits and the authentication circuits to a data bus in Candelaore et al.

Accordingly, neither Wu et al. nor Candelore et al. disclose or suggest features in independent Claims 5, 15, 29 and 35. Because Wu et al. and Candelore et al. do not individually disclose or suggest features in these claims, the combination of Wu et al. and Candelore et al. cannot disclose or suggest the features of these claims or the claims depending directly or indirectly therefrom. Thus, a *prima facie* case of obviousness cannot be made against Claims 5, 7-8, 15, 29 and 35 using these references.

The Examiner has rejected Claims 32-34 under 35 U.S.C. §103(a) as being unpatentable over Wu et al. in view of Candelaore et al. and further in view of Kocher et al., U.S. Patent No. 6,304,658. This rejection is respectfully traversed. Claims 32-34 depend directly or indirectly from Claim 5. As stated previously, in an effort to clarify embodiments of Applicant's invention over the cited art and pass the claims to allowance at an earliest possible date, Applicant has amended Claim 5.

Kocher et al. does not make up for the deficiencies in Wu et al. and Candelore et al. discussed above. Kocher et al. is directed toward a method and apparatus for securing cryptographic devices against attacks involving external monitoring and analysis. Kocher et al. discloses leak-proof and leak-resistant systems that implement a variety of cryptographic algorithms. There is no disclosure or suggestion in Kocher et al. of coupling a plurality of processors to a second data bus independent of each other and independent of the control unit, the processors including at least one encryption processor and at least one authentication processor, as recited in amended Claim 5.

Accordingly, neither Wu et al., Candelore et al. nor Kocher et al. disclose or suggest features in independent Claim 5 and, consequently, dependent Claims 32-34. Because Wu et al., Candelore et al. and Kocher et al. do not individually disclose or suggest features in these claims, the combination of Wu et al., Candelore et al. nor Kocher et al. cannot disclose or suggest the features of these claims. Thus, a *prima facie* case of obviousness cannot be made against Claims 32-34 using these references.

The Examiner has rejected Claims 1-4, 9-14, 16-21, 23-28, 30 and 31 under 35 U.S.C. §103(a) as being unpatentable over Wu et al. This rejection is respectfully traversed. However, in an effort to clarify embodiments of Applicant's invention over the cited art and pass the claims to allowance at an earliest possible date, Applicant has amended Claims 1, 9, 16, 23 and 30.

As amended, Claim 1 recites A packet processor comprising a control unit having a data input; at least one encryption processor; a first authentication processor; a second authentication processor; a local data bus, independent of the data input to the control unit, coupling the control unit to each of the encryption and authentication processors; and a second data bus from the encryption processor to each authentication processor, including a data bus from the first authentication processor to the second authentication processor, wherein the control unit is configured to control the at least one encryption processor and the first and second authentication processors such that a first set of data and a second set of data sent from the at least one encryption processor to the first authentication processor and the second authentication processor, respectively, are processed by the first authentication processor and the second authentication processor while the at least one encryption processor processes a third set of data, and wherein the at least one encryption processor, the first authentication processor and the second authentication processor are coupled to the local data bus independent of each other and independent of the control unit. Claims 9, 16, 23 and 30 recite similar features. These features are not disclosed or suggested in Wu et al.

As stated above, Wu et al. discloses data authentication in a number of places. However, there is no disclosure or suggestion in Wu et al. that an authentication processor and an encryption processor are coupled to a data bus independently of each other. Moreover, as stated above, Wu et al. suggests that encryption is actually *dependent* on authentication in that the Wu et al. "process uses a user's primary authentication token for a primary authentication service, such as a password, private key, or other unique data, to encrypt the user's other authentication tokens for other secondary authentication services" (Wu et al., column 3, lines 58-62) and, in fact, does not even disclose an encryption processor separate from an authentication processor.

Moreover, the Examiner has not provided any other reference disclosing or suggesting that at least one encryption processor, a first authentication processor and a second authentication processor are coupled to a local data bus independent of each other and independent of a control unit.

Accordingly, Wu et al. does not disclose or suggest features in independent Claims 1, 9, 16, 23 and 30 or the claims depending directly or indirectly therefrom. Thus, a *prima facie* case of obviousness cannot be made against these claims using the Wu et al. reference.

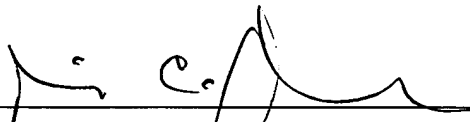
Applicant has added Claims 47-49. Claims 47-49 depend either directly or indirectly from Claim 1 and are believed to be allowable for at least the same reasons as Claim 1.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-0872.

Respectfully submitted,

Date 6 - 23 - 04

FOLEY & LARDNER LLP
Customer Number: 23392
Telephone: (310) 975-7963
Facsimile: (310) 557-8475

By 

Irvin C. Harrington, III
Attorney for Applicant
Registration No. 44,740